## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-15. (cancelled)
- 16. (currently amended) A method of verifying that an object is genuine, including the steps of:

creating a genuine object having a primary identifier in the form of a plurality of identification elements embedded in the object, the identification elements being detectable when illuminated by infrared or ultraviolet electromagnetic radiation selected from the group consisting of infrared and ultraviolet, but being indistinguishable from the rest of the object when illuminated with visible light, wherein the identification elements are randomly distributed so that the positions of the identification elements are unique to the genuine object, and wherein the genuine object is provided with a reference point in the form of a printed symbol;

identifying a sub-area of the genuine object defined by the reference point; recording information relating to the positions of identification elements in the sub-area of the genuine object relative to the reference point; and

comparing measured information relating to the positions of identification elements in an object to be verified with the recorded information for the genuine object.

- 17. (original) A method as claimed in claim 16, wherein only information relating to identification elements within the sub-area of the genuine object is recorded.
- 18. (currently amended) A method as claimed in claim 16 or claim 17, including the step of measuring the positions of identification elements in the object to be verified.
- 19. (original) A method as claimed in claim 18, wherein the positions of identification elements in the object to be verified are measured relative to a reference point in the object to be verified.

- 20. (currently amended) A method as claimed in any of claims 16 to 19 claim 16, wherein the information relating to the positions of the identification elements in the genuine object is converted into an alphanumerical code and recorded in this form.
- 21. (original) A method as claimed in claim 20, wherein the alphanumerical code is unique to that object.
- 22. (currently amended) A method as claimed in claim 20 or claim 21, wherein the measured information relating to the positions of identification elements in the object to be verified is also in the form of an alphanumerical code, and the step of comparing the information comprises comparing these alphanumerical codes.
- 23. (original) A method as claimed in claim 22, wherein corresponding numbers in each alphanumerical code are compared to within a specified tolerance level.
- 24. (currently amended) A method as claimed in any of claims 16 to 23 claim 16, wherein the genuine object is provided with a secondary identifier, and the method includes the step of detecting and recording information relating to the secondary identifier.
- 25. (original) A method as claimed in claim 24, wherein the secondary identifier is unique to the object.
- 26. (currently amended) A method as claimed in claim 24 or claim 25, wherein information relating to the object to be verified is only compared to recorded information relating to genuine objects having the same secondary identifier.
- 27. (currently amended) A method as claimed in any of claims 16 to 26 claim 16, wherein a plurality of genuine objects are created and recorded.

- 28. (currently amended) A method as claimed in any of claims 16 to 27 claim 16, wherein the identification elements are fluorescent, and the method includes the steps of illuminating the identification elements with ultraviolet light and detecting the emitted electromagnetic radiation with an image making apparatus a camera.
- 29. (currently amended) A method as claimed in claim 28, wherein the an image created by the camera is analysed and converted into alphanumerical data.
- 30. (currently amended) A method as claimed in any of claims 16 to 29 claim 16, wherein the genuine object comprises paper, and the method includes the step of adding the identification elements to the paper during the paper-making process.

31. (currently amended) A detector for verifying that an object is genuine, the object comprising a primary identifier in the form of a plurality of identification elements embedded in the object, the identification elements being detectable when illuminated by infrared or ultraviolet electromagnetic radiation selected from the group consisting of infrared and ultraviolet, but being indistinguishable from the rest of the object when illuminated with visible light, the identification elements being randomly distributed so that the positions of the identification elements are unique to the object, and the object further comprising a reference point in the form of a printed symbol,

the detector comprising:

a source of infrared or ultraviolet electromagnetic radiation selected from the group consisting of infrared and ultraviolet;

image making apparatus for making an image of at least a part of the object a camera; image analysis equipment for converting the an image made by the camera into an alphanumerical code;

a database into which the alphanumerical code can be recorded and from which alphanumerical codes relating to other recorded camera images can be retrieved; and

processing equipment adapted to compare the alphanumerical code relating to the object being verified with the other alphanumeric codes already stored in the database relating to recorded <u>camera</u> images;

wherein the detector is adapted to identify a sub-area of the object defined by the reference point and to record information relating to the positions of the identification elements in the sub-area relative to the reference point.

- 32. (currently amended) A detector as claimed in claim 31, wherein the detector is adapted to detect the location of the reference point on the object and to direct the image making apparatus camera to this part of the object.
- 33. (currently amended) A detector as claimed in any of claims 31 to 34 claim 31, wherein the detector is adapted to detect the location of the reference point on the object and to direct the image analysis equipment to a corresponding part of the image.

- 34. (currently amended) A detector as claimed in any-of claims-31-to 33 claim 31, wherein the source of electromagnetic radiation comprises a source of ultraviolet light.
- 35. (currently amended) A detector as claimed in any of claims 31 to 34 claim 31, wherein the image analysis equipment is adapted to divide the camera image into a plurality of sub-regions and to count the number of pixels illuminated in each sub-region to produce an alphanumeric code corresponding to the camera image.
- 36. (currently amended) A detector as claimed in any of claims 31 to 35 claim 31, wherein the detector is adapted to recognise and record information relating to a secondary identifier, and the processing equipment is adapted to compare the alphanumerical code relating to the object to be verified only to alphanumerical codes relating to recorded objects that have the same secondary identifier.